

 Projects

## Magazine

Create a multi-page magazine website.



### Step 1 Introduction

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In this project, you'll learn how to use HTML and CSS to create a multi-page magazine website with a two page layout. You'll also revisit lots of HTML and CSS techniques from other projects.



Additional information for club leaders

If you need to print this project, please use the Printer friendly version (<https://projects.raspberrypi.org/en/projects/magazine/print>).

This project covers elements from the following strands of the Raspberry Pi Digital Making Curriculum (<https://rpf.io/curriculum>):

- Design basic 2D and 3D assets (<https://www.raspberrypi.org/curriculum/design/creator>).

#### Challenges

- “Add items to the left column” - placing items inside a floated element;
- “Add a link back to the first page” - creating links between pages in a project;
- “Fill in your second page” - recapping more HTML & CSS;
- “Add another animation” - recapping animations.



## Project materials

## Project resources

- .zip file containing all project resources (<https://rpf.io/p/en/magazine-go>).
- Online Trinket containing all 'Magazine' project resources (<http://jumpto.cc/web-magazine>).
- Online Trinket template (<http://jumpto.cc/trinket-template>).
- Online blank Trinket (<http://jumpto.cc/trinket-blank>).
- template/index.html (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/template-index.html>).
- template/style.css (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/template-style.css>).
- intro/index.html (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/intro-index.html>).
- intro/style.css (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/intro-style.css>).
- magazine/index.html (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-index.html>).
- magazine/style.css (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-style.css>).
- magazine/script.js (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-script.js>).
- magazine/kitten.jpg (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-kitten.jpg>).
- magazine/recipe-final.png (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-recipe-final.png>).
- magazine/greenrobot.png (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-greenrobot.png>).
- magazine/firerobot.png (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-firerobot.png>).
- magazine/spacerobot.png (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-spacerobot.png>).
- magazine/dogrobot.png (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-dogrobot.png>).

## Club leader resources

- .zip file containing all completed project resources (<https://rpf.io/p/en/magazine-go>).
- Online completed Trinket project (<https://trinket.io/html/a41e4e1c5c>).
- magazine-finished/index.html (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-finished-index.html>).
- magazine-finished/style.css (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-finished-style.css>).
- magazine-finished/script.js (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-finished-script.js>).
- magazine-finished/kitten.jpg (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-finished-kitten.jpg>).
- magazine-finished/recipe-final.png (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-finished-recipe-final.png>).
- magazine-finished/greenrobot.png (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-finished-greenrobot.png>).
- magazine-finished/spacerobot.png (<https://projects-static.raspberrypi.org/projects/magazine/111038812961b43754a000eec34e26076f1ec813/en/resources/magazine-finished-spacerobot.png>).

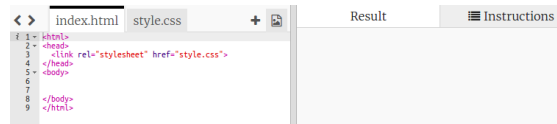
## Step 2 Heading and Background

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Magazine-style websites often have lots of small items on a page. First you're going to create a heading and background for your magazine.

- Open this trinket: [jump.to/cc/web-magazine](http://jump.to/cc/web-magazine) (<http://jump.to/cc/web-magazine>).

The project should look like this:



```

<> index.html style.css +
1 <html>
2 <head>
3 <link rel="stylesheet" href="style.css">
4 </head>
5 <body>
6
7
8 </body>
9 </html>
  
```

- Let's add a heading.

You can think of a better title for your magazine.



```

<body>
  <h1>My Magazine</h1>
</body>
</html>
  
```

- Can you style the heading?

Here's an example, but you can choose your own style:

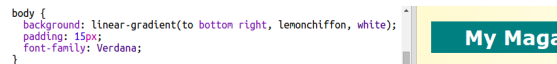


```

h1 {
  text-align: center;
  color: white;
  background: teal;
  padding: 5px;
}
  
```

- Now let's create an interesting background using a gradient and choose a font for the magazine.

Here's some example style as a reminder of how to create a gradient:



```

body {
  background: linear-gradient(to bottom right, lemonchiffon, white);
  padding: 15px;
  font-family: Verdana;
}
  
```

## Step 3 Creating Columns

Websites often use multiple columns. Let's create a two column layout for your magazine.

- First create two column `div`s.

Add the highlighted HTML to `index.html`:

```
<h1>My Magazine</h1>
<div class="column1">
</div>
<div class="column2">
</div>
```

- Now style the column `div`s so that one floats to the left and the other floats to the right.

```
.column1 {
width: 48%;
float: left;
}
.column2 {
width: 48%;
float: right;
}
```




Each column is less than 50% so there's room for padding.

You'll need to add something to a column to see the effect.

- Let's add a kitten picture to the top of column 2.

```
<div class="column2">

</div>
</body>
</html>
```




Notice that the kitten image is positioned about half-way across the page, in the second column.

It's a bit big though!

- Let's use `max-width:` to make images fit within their container.

Add the following style to `style.css`.

```
img {
max-width: 100%;
}
```



This will apply to all images you use in your magazine, not just the kitten.

- Now add a class `photo` to the image so that you can style it:

```
<div class="column2">  
    
</div>
```

- And style the image to add a shadow and a twist to make the photo pop out of the page:

```
.photo {  
  box-shadow: 4px 4px 4px gray;  
  transform: rotate(10deg);  
}
```



Make some changes until you like the result.

## Step 4 Style magazine items

---

Let's make the layout a bit more interesting.

- Add a `div` around your image with a `class` and add a `h2` heading:

```
<div class="column2">
  <div class="item">
    <h2>Cute Kitten!</h2>
    
  </div>
</div>
</body>
</html>
```

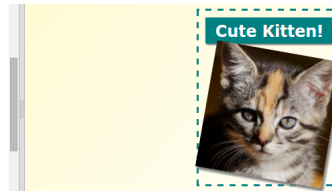


- Now style the item and heading.

Here's an example, but you can make changes:

```
h2 {
  color: white;
  background: teal;
  padding: 5px;
  margin: 0px 0px 10px 0px;
  box-shadow: 2px 2px 2px gray;
  text-align: center;
}

.item {
  padding: 10px;
  margin-bottom: 10px;
  border: 3px dashed teal;
}
```



## Step 5 Challenge: Add items to the left column

---

Can you add a ordered list and a gradient text sticker to the left column?

Here's an example:



This is the code for the example, but you can change it or come up with your own.

HTML:

```
<div class="column1">
  <div class="item">
    <h2>Top 5 Cakes</h2>
    <ol>
      <li>Chocolate Eclair</li>
      <li>Victoria Sponge</li>
      <li>Iced Bun</li>
      <li>Lemon Drizzle</li>
      <li>Jam Doughnut</li>
    </ol>
  </div>
  <div class="item">
    <div class="sticker" id="robots"> I &lt;3 <br>Robots</div>
  </div>
</div>
```

CSS:

```
#robots {
  font-size: 30px;
  color: white;
  background: linear-gradient(green, yellow, orange, red, purple, blue);
  padding: 30px;
  border-radius: 5px;
  text-align: center;
}
```

## Step 6 Add a second page

Let's add another page to your magazine website.

- Add a new page to your project and name it `page2.html`:



- Page 2 will be quite similar to the first page of your magazine so you can copy the html from `index.html` and paste it into `page2.html`.

```
index.html style.css page2.html
<html>
<head>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <h1>My Magazine</h1>
  <div class="column1">
    <div class="item">
      <h2>Top 5 Cakes</h2>
      <ol>
        <li>Chocolate Eclair</li>
        <li>Victoria Sponge</li>
```

Notice that both pages use the same `style.css` so they will share styles.

- Change the `<h1>` title for page2:

```
index.html style.css page2.html
<html>
<head>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <h1>My Magazine - Page 2</h1>
  <div class="column1">
    <div class="item">
      <h2>Top 5 Cakes</h2>
```

- Now you'll need links between your pages so you can get to page 2 and back to the front page.

Go back to `index.html`. Add a link inside a div in column 2 in `index.html`:

```
<div class="column2">
  <div class="item">
    <h2>Cute Kittens</h2>
    
  </div>
  <div class="item">
    <a href="page2.html">Page 2</a>
  </div>
</div>
</body>
</html>
```



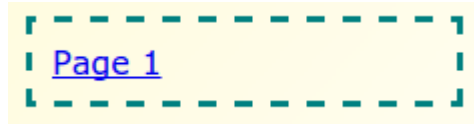
- Test that you can click on your new link and move to page 2 of your magazine.

## Step 7 Challenge: Add a link back to the first page

---

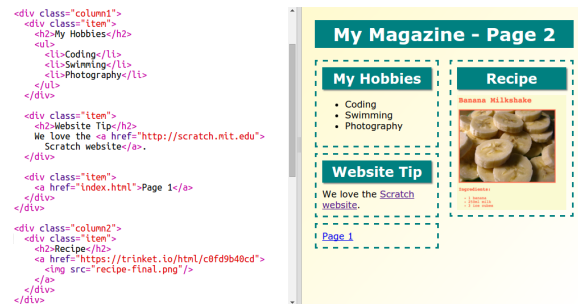
Can you add a link to `page2.html` so that you can click on it to get back to the first page?

Hint: Look at the HTML you used to create a link to page 2.

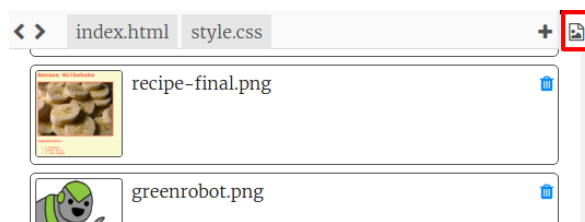


## Step 8 Challenge: Fill in your second page

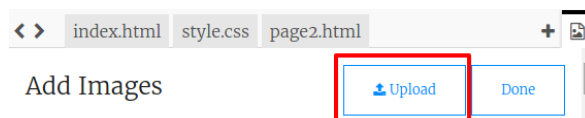
Here's the code for the examples, but you can change the `divs` or come up with your own ideas.



Click the images icon to see the images that are available to use:



Remember that you can upload your own images to use. Make sure you have permission to use any images that you upload.

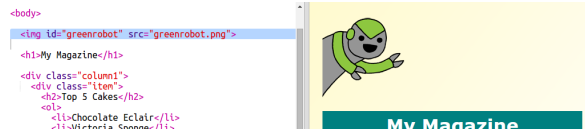


## Step 9 Add an animation

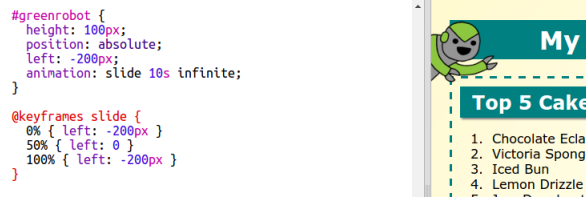
---

Let's add a fun animation to your magazine.

- Go to `index.html` and include the `greenrobot.png` image at the top of your page.



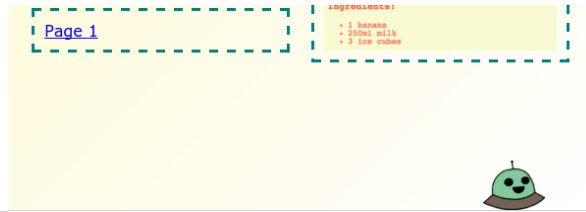
- Now add the CSS to animate your robot:



## Step 10 Challenge: Add another animation

---

Can you add an animation to the second page of your magazine?



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View project & license on GitHub (<https://github.com/RaspberryPiLearning/magazine>).